

### **Remarks/Arguments**

Applicants have amended the claims of the subject application as set forth herein above, which includes a cancellation of Claims 18-24, and respectfully urge that there is no additional fee for this amendment as the number of independent claims and the total number of claims has been reduced.

Applicants have cancelled Claims 18-24 from the subject application. In addition, Applicants have amended Claims 1, 9 and 13 by incorporating additional elements of the rotating valve structure employed in the oven of the invention claimed by Applicants. More particularly, Applicants have amended these claims to provide that the rotating valve comprises a cylindrical housing having open ends, a separator wall disposed within the cylindrical housing separating the open ends from each other, and at least two cylindrical side wall openings disposed on opposite sides of the cylindrical housing and opposite sides of the separator wall. This amendment is fully supported by Fig. 5 of the subject application as well as the description beginning at Page 13, line 7 of the specification. Accordingly, Applicants respectfully urge that this amendment incorporates no new subject matter into the application and is fully supported by the application as originally filed.

The invention claimed by Applicants is an oven for cooking food comprising a cooking chamber defined at least in part by a first pair of oppositely

disposed first and second wall structures, each of which forms a plurality of spaced apart openings for the passage of air therethrough. The oven further comprises a cylindrical rotating valve comprising a cylindrical housing with first and second opposed open ends. A separator wall disposed within the cylindrical housing separates the first and second opposed open ends from each other. In addition to having open ends, the cylindrical housing forms diametrically opposed first and second fluid openings disposed on opposite sides of the separator wall and revolvable around a longitudinal axis of rotation of the rotating valve. By virtue of this configuration, the rotating valve is in both heated air receiving communication and return air communication with a heat source. The rotating valve is also in heated air distributing communication with the first wall structure and in return air communication with the second wall structure of the first pair of oppositely disposed first and second wall structures at a selected point in time such that heated air is passed through the plurality of spaced apart openings in the first wall structure into the cooking chamber and return air from the cooking chamber is passed through the plurality of spaced apart openings in the oppositely disposed second wall structure and to the rotating valve for return to the heat source. The rotating valve is also capable of rotation so as to be in heated air distributing communication with the second wall structure and in return air communication with the first wall structure, i.e. reversing

the flow of air through the oven. Applicants respectfully urge that the prior art relied upon by the Examiner as the basis for rejection of the subject application neither teaches nor suggests an oven as claimed by Applicants.

Claims 1-24 have been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-25 of U.S. Patent 6,517,882 (hereinafter “the ‘882 patent”) in view of Rhoads et al., U.S. Patent 3,861,378 (hereinafter “the Rhoads et al. patent”). This rejection is respectfully traversed. MPEP § 804.II.B.1 states that “obviousness-type double patenting requires rejection of an application claim when the claimed subject matter is **not patentably distinct** from the subject matter claimed in a commonly owned patent when issuance of a second patent would provide unjustified extension of the term of the right to exclude granted by a patent.” Applicants respectfully urge that the requirements for an obviousness-type double patenting rejection are not met by this rejection because, in addition to the cited commonly owned patent, the Examiner also relies upon the Rhoads et al. patent, which is not commonly owned, for the determination of obviousness. Applicants respectfully urge that the very reliance by the Examiner upon the Rhoads et al. patent for determination of obviousness is an acknowledgment by the Examiner that the invention claimed in the subject patent application *is patentably distinct* from the subject matter of the ‘882 patent, particularly because it

impermissibly relies upon elements not taught or suggested by the '882 patent for the determination of obviousness. Accordingly, Applicants respectfully urge that the combination of the '882 patent and the Rhoads et al. patent does not constitute impermissible double patenting in accordance with the requirements of the judicially created doctrine of obviousness-type double patenting as set forth in MPEP § 804.

Claims 1, 3-8 and 13-17 have been rejected under 35 U.S.C. 103(a) as being unpatentable over the Rhoads et al. patent in view of Van Elten et al., U.S. Patent 4,108,056 (hereinafter "the Van Elten et al. patent"). This rejection is respectfully traversed. The Rhoads et al. patent teaches an oven having a removable bottom portion and an upper plenum portion containing a heater element and a fan which forces air across the heater elements down through one of the sides of the oven through a tapered duct and outwardly through a diffuser panel into the oven. Part of the air re-enters the plenum portion in the center and part of it passes through a second diffuser panel back up a second tapered duct and back into the plenum portion. The oven further comprises a pair of flaps 65 and 67 that are simultaneously movable to new positions by which the direction of air flow in the oven can be reversed to provide more uniform heating of the food product (Abstract, Col. 3, lines 28-40, Fig. 2). Fig. 3 of the Rhoads et al. patent shows the mechanism by which the flaps 65 and 67 are alternately opened and closed. As shown therein, the motor 69 drives a cam

71 which holds the lever arm 73 in the position shown during half of its revolution and forces the flap 65 down while simultaneously raising flap 67 during the second half of its revolution (Col. 3, lines 41-51). As can better be seen in Fig. 2 of the Rhoads et al. patent, when flap 65 is in the “down position” and flap 67 is in the “up position”, the flow of air is from left to right in the figure. When flap 65 is in the “up position” and flap 67 is in the “down position”, the flow of air is from right to left. The Examiner has argued that the valve of the Rhoads et al. patent is a rotating valve on the basis that lever arm 73 rotates around an axis and alternately raises and lowers flaps 65 and 67. It is clear that the fluid openings of the Rhoads et al. patent, that is the openings that are opened and closed by action of the flaps are stationary with respect to the axis of lever arm 73. Thus, Applicants respectfully urge that *the valve assembly of the Rhoads et al. patent is not a rotating valve having fluid openings that revolve around the longitudinal axis of rotation of the rotating valve*, nor is the valve assembly of the Rhoads et al. patent a cylindrical rotating valve as required by Applicants’ claimed invention, facts acknowledged by the Examiner. Rather, for these latter elements, the Examiner relies upon the teachings of the Van Elten et al. patent.

The Van Elten et al. patent teaches an apparatus for storing cheese loaves which includes an air circulation system having a fan 190 capable of

circulating a stream of air in one or another direction depending upon the adjustment of a valve mechanism 194. When the valve mechanism is adjusted as shown in Fig. 8, the air fed by the fan 190 flows through a duct 196 through the valve mechanism 194 to a duct 198 and then to the passageway 180 and through the top openings into the hollow walls bearing even numbers and through the pipes 188 into the interior of the unit. The pipes communicating with the odd-numbered hollow walls conduct air from the interior of the units through the hollow walls into the passageway 182 and then through duct 200 through the valve mechanism 194 to the suction side of the fan 190. The circulation is reversed by turning the valve mechanism 194 through 90°. The Examiner argues that the valve mechanism 194 of the Van Elten et al. patent constitutes a cylindrical rotating valve having fluid openings revolvable around a longitudinal axis of the rotating valve as claimed by Applicants. Applicants respectfully urge, however, that in addition to having laterally disposed fluid openings revolvable around the longitudinal axis of the rotating valve, the invention claimed by Applicants further requires that the opposed ends of the cylindrical rotating valve be open and that one of the laterally disposed fluid openings is proximate one of the open ends and the other laterally disposed fluid opening is disposed proximate the other open end. That is, the lateral fluid openings are disposed in different transverse planes of the rotating valve. Applicants respectfully urge that the Van Elten et al.

patent neither teaches nor suggests that the ends of the valve mechanism 194 are open or that the lateral openings are disposed in different transverse planes as required by Applicants' claimed invention. Indeed, it would appear that if the ends of the valve mechanism 194 were open, whenever the fluid openings were rotated, there would be a brief period of time during the transition when the air flowing through the openings would be exhausted into the atmosphere. In addition, it is also clear that the openings of the Van Elten et al. valve mechanism are in the same transverse plane in contrast to the invention claimed by Applicants. Were it otherwise, the openings of the valve of the Van Elten et al. patent would not align properly with the duct openings after one rotation of the valve to change the direction of air flow. Accordingly, Applicants respectfully urge that the Rhoads et al. patent and the Van Elten et al. patent, which neither alone or in combination teach or suggest an oven comprising a cylindrical rotating valve having the disposition of openings for fluid flow as claimed by Applicants, do not render Applicants claimed invention obvious in the manner required by 35 U.S.C. 103(a).

Claims 2 and 18-22 have been rejected under 35 U.S.C. 103(a) as being unpatentable over the Rhoads et al. patent in view of the Van Elten et al. patent as discussed herein above, and further in view of König, U.S. Patent 4,779,604 (hereinafter "the König patent"). Applicants respectfully urge that, with respect to

Claims 18-22, this rejection is rendered moot as a result of the cancellation of Claims 18-22 by the above amendment. As to the rejection of Claim 2, Applicants respectfully traverse this rejection. Applicants' arguments with respect to the Rhoads et al. patent and the Van Elten et al. patent are equally applicable to this rejection and, thus, will not be repeated other than to reiterate that an oven having a rotating valve as claimed by Applicants is neither taught nor suggested by the Rhoads et al. and Van Elten et al. patents. The König patent is relied upon by the Examiner as teaching a baking device having a burner, based upon which the Examiner argues that it would be obvious to one of ordinary skill in the art to utilize the burner of the König patent in the oven derived from the combination of the teachings of the Rhoads et al. patent and the Van Elten et al. patent to arrive at the invention claimed by Applicants. Applicants respectfully disagree.

Applicants respectfully urge that, because the Rhoads et al. and Van Elten et al. patents neither teach nor suggest an oven comprising a cylindrical rotating valve having open opposed ends and having laterally disposed fluid openings in different transverse planes revolvable around the longitudinal axis of rotation of the rotating valve as required by the invention claimed by Applicants, one skilled in the art who combines the teachings of the König patent with the teachings of the Rhoads et al. and Van Elten et al. patents would not arrive at the invention claimed by

Applicants. Accordingly, Applicants respectfully urge that the Rhoads et al. patent, the Van Elten et al. patent and the König patent, alone or in combination, do not render Applicants' claimed invention obvious in the manner required by 35 U.S.C. 103(a).

Claims 23-24 have been rejected under 35 U.S.C. 103(a) as being unpatentable over the Rhoads et al. patent in view of the Van Elten et al. patent as discussed herein above, and further in view of Guibert, U.S. Patent 4,455,478 (hereinafter "the Guibert patent"). Applicants respectfully urge that this rejection is rendered moot as a result of the cancellation of Claims 23-24 by the above amendment.

Claims 9-12 have been rejected under 35 U.S.C. 103(a) as being unpatentable over the Rhoads et al. patent in view of the Van Elten et al. patent and the Guibert patent as previously discussed, and further in view of the König patent. This rejection is respectfully traversed. Applicants note that the Guibert patent has previously been applied against only Claims 23-24 of the subject application. Accordingly, Applicants are uncertain as to the manner in which the Guibert patent is intended to be applied to the instant rejection. Applicants presume that the Examiner is relying upon the Guibert patent as teaching a food heating device comprising a cylindrical rotating valve with open ends and side mounted openings

upon which presumption this response is based. Applicants' arguments with respect to the Rhoads et al. patent, the Van Elten et al. patent and the König patent are equally applicable to this rejection and, thus, will not be repeated other than to reiterate that an oven having a rotating valve and burner as claimed by Applicants is neither taught nor suggested by the Rhoads et al., Van Elten et al. and König patents. The Guibert patent teaches a portable unit for heating packaged foods which includes a multi-level rack disposed within a case or housing, a vertically oriented air modulator having a stationary outer tube with a series of longitudinally-aligned ports in communication with said multiple levels and a rotating inner tube having open ends and a series of angularly-displaced holes which successively register with the longitudinally oriented ports in the course of a rotation of the inner tube (Abstract). However, the Guibert patent neither teaches nor suggests a transversely oriented separator wall disposed within the inner tube for maintaining a separation between the open ends thereof as required by the rotating valve of the invention claimed by Applicants, as a result of which air entering the inner tube of the device of the Guibert patent at one end is directly expelled through the opposite end of the inner tube, an occurrence which is precluded by the presence of the separator wall in the rotating valve of the invention claimed by Applicants. Accordingly, Applicants respectfully urge that the Rhoads et al. patent, the Van Elten et al. patent, the König patent and the Guibert patent, alone

Serial No.: 09/835,078

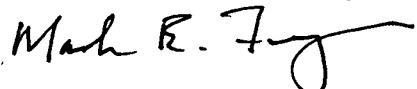
or in combination, do not render Applicants' claimed invention obvious in the manner required by 35 U.S.C. 103(a).

**Conclusion**

Applicants intend to be fully responsive to the outstanding Office Action. If the Examiner detects any issue which the Examiner believes Applicants have not addressed in this response, Applicants urge the Examiner to contact the undersigned.

Applicants sincerely believe that this patent application is now in condition for allowance and, thus, respectfully request early allowance.

Respectfully submitted,



Mark E. Fejer  
Regis. No. 34,817

Gas Technology Institute  
1700 South Mount Prospect Road  
Des Plaines, Illinois 60018  
TEL (847) 768-0832; FAX (847) 768-0802